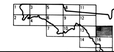
MAR 14 '90 I 49.89: 87/47-1/map C 15

MAP C15

Gainesville

FLORIDA ECOLOGICAL ATLAS

SOILS AND LANDFORMS



MMS 85-0011
FWS/OBS-82/47.1

ORIGINAL

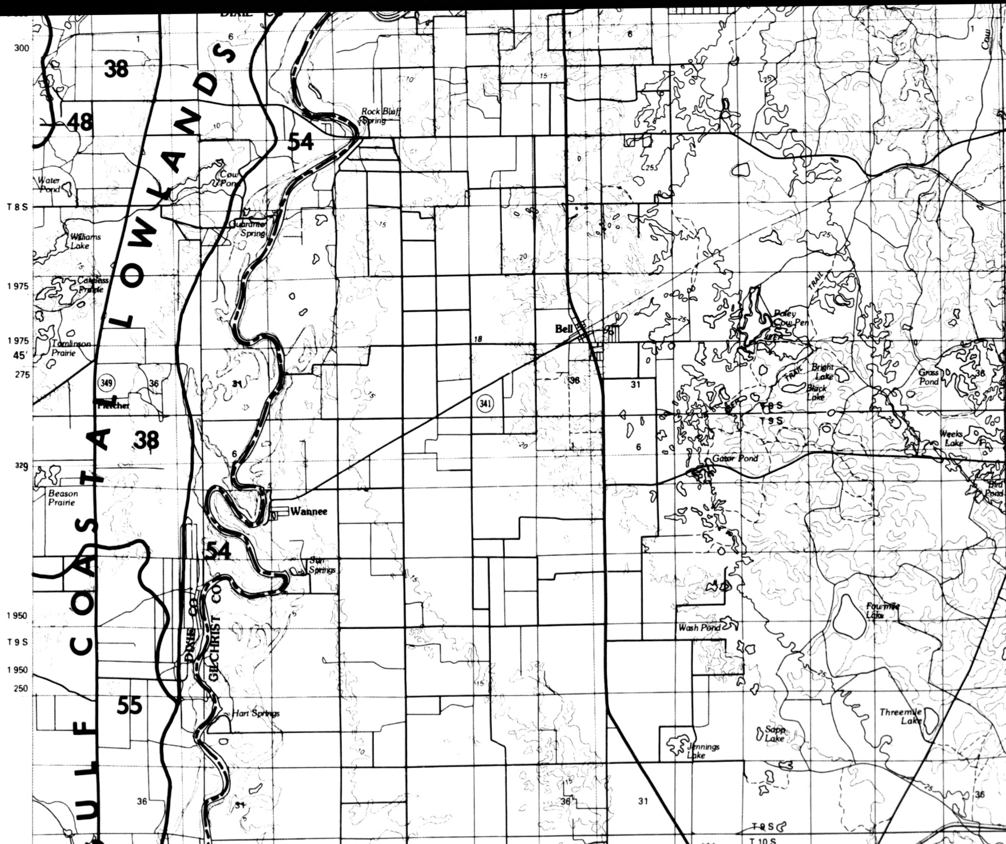
Scale 1:100 000

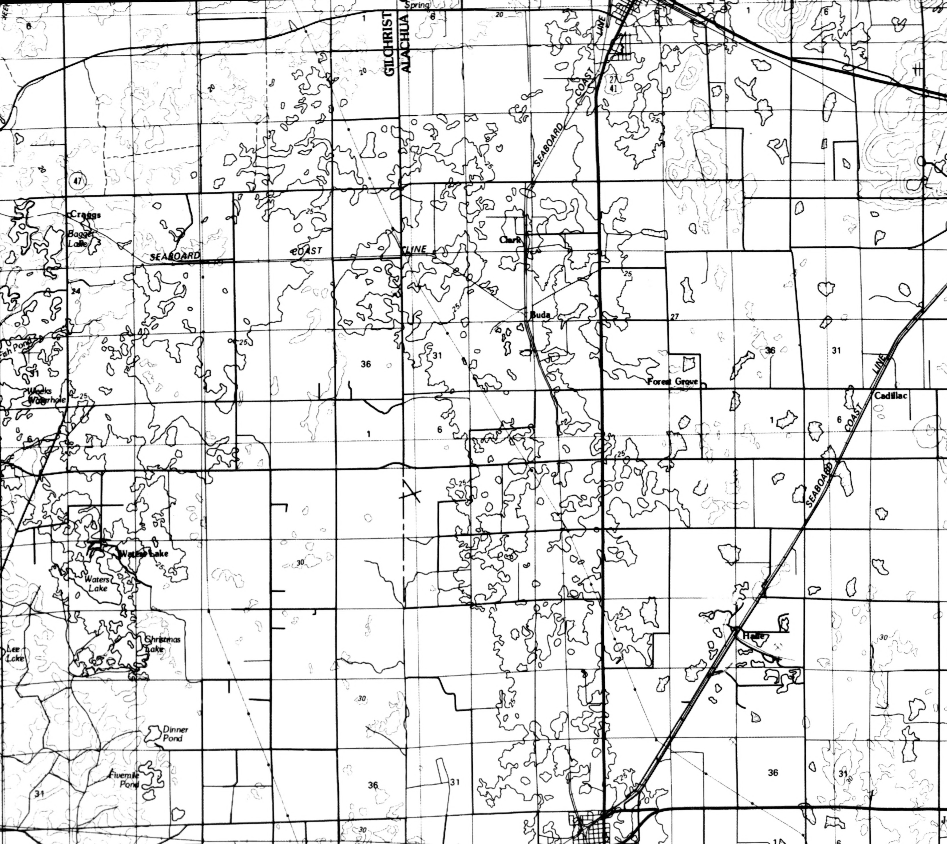
TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. SOCIOECONOMIC FEATURES
C. SOILS AND LANDFORMS
D. OIL, GAS AND MINERALS
E. HYDROLOGY AND CLIMATOLOGY

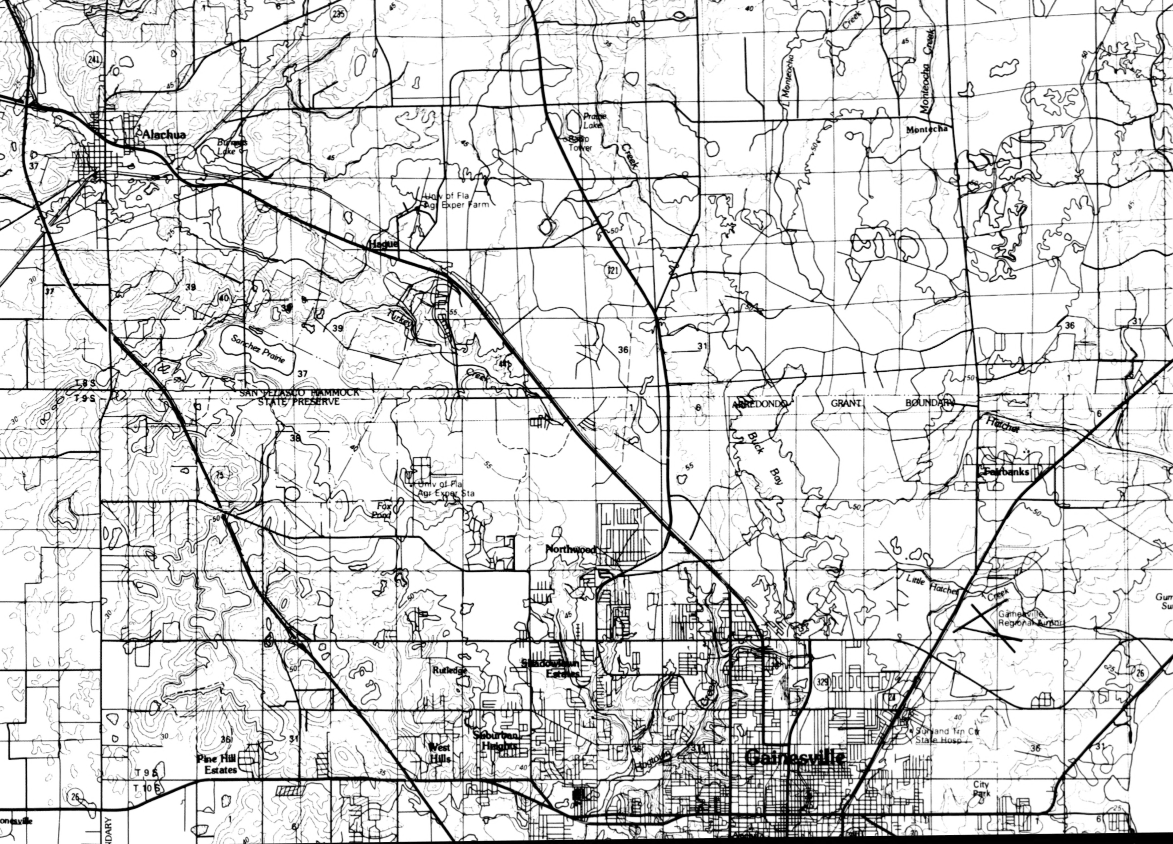
1984

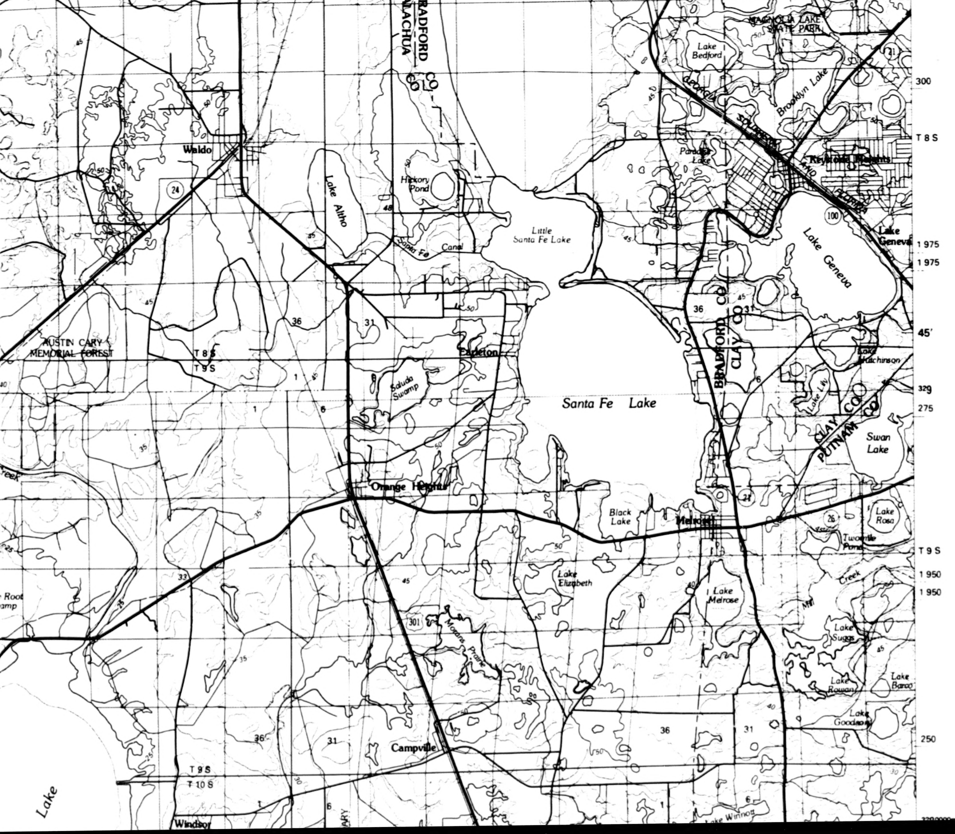
Produced by U.S. Fish and Wildlife
Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17: Universal
Transverse Mercator


ULF COASTAL LOWLANDS
DIXIE CO
GILCHRIST CO
38
48
54
55
300
T 8 S
1 975
45′
275
329
1 950
T 9 S
250
Water Pond
Cow Pond
Rock Bluff Spring
Williams Lake
Careless Prairie
Tomlinson Prairie
349
Fletcher
Beason Prairie
Guarantee Spring
Wannee
Sun Springs
Hart Springs
Bell
18
341
Paley Cow Pen
TRAIL
Bright Lake
Black Lake
Grass Pond
Weeks Lake
Gator Pond
Bird Pond
Fourmile Lake
Wash Pond
Threemile Lake
Sapp Lake
Jennings Lake
T 8 S
T 9 S
T 10 S
Cow
1
6
31
36
10
15
20
25


Spring
GILCHRIST
ALACHUA
20
SEABOARD COAST LINE
27
41
47
Craggs
Bagget Lake
SEABOARD
COAST
LINE
Clark
Buda
Fish Pond
Weeks Waterhole
Forest Grove
Cadillac
SEABOARD COAST LINE
Waters Lake
Waters Lake
Christmas Lake
Lee Lake
Haile
Dinner Pond
Fivemile Pond
24
25
30
1
6
31
36
3


Alachua
Burnetts Lake
Prairie Lake
Ramp Tower
Montecha
Monteocha Creek
Univ of Fla Agr Exper Farm
Hague
Turkey Creek
Sanchez Prairie
SAN FELASCO HAMMOCK STATE PRESERVE
T 8 S
T 9 S
ARREDONDO GRANT BOUNDARY
Hatchet
Buck Bay
Fairbanks
Univ of Fla Agr Exper Sta
Fox Pond
Northwood
Little Hatchet Creek
Gainesville Regional Airport
Shadowlawn Estates
Rutledge
Suburban Heights
West Hills
Pine Hill Estates
T 9 S
T 10 S
Gainesville
Sunland Trn Ctr State Hosp
City Park
241
235
121
329
24
26
20
45
50
55
40
35
30
25
75
36
31
1
6
37
38
39
40
onesville
DARY


BRADFORD CO
ALACHUA CO
MAGNOLIA LAKE STATE PARK
Lake Bedford
Brooklyn Lake
GEORGIA SOUTHERN AND FLORIDA
Paradise Lake
Keystone Heights
Waldo
Hickory Pond
Lake Altho
Santa Fe Canal
Little Santa Fe Lake
Lake Geneva
Lake Geneva
AUSTIN CARY MEMORIAL FOREST
T 8 S
T 9 S
Earleton
Saluda Swamp
Santa Fe Lake
BRADFORD CO
CLAY CO
Lake Hutchinson
Lake Lily
CLAY CO
PUTNAM CO
Swan Lake
Orange Heights
Black Lake
Melrose
Lake Rosa
Twomile Pond
Lake Elizabeth
Lake Melrose
Mill Creek
Lake Suggs
Lake Rowan
Lake Barco
Lake Goodson
Moran Prairie
Campville
Windsor
Lake Winnott
Lake
Root Swamp
Creek
T 9 S
T 10 S
24
100
301
26
21
300
T 8 S
1 975
1 975
45′
329
275
T 9 S
1 950
1 950
250
3290000m N

Produced by U.S. Fish and Wildlife
Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17: Universal Transverse Mercator
25,000-foot grid ticks based on Florida coordinate system, west zone

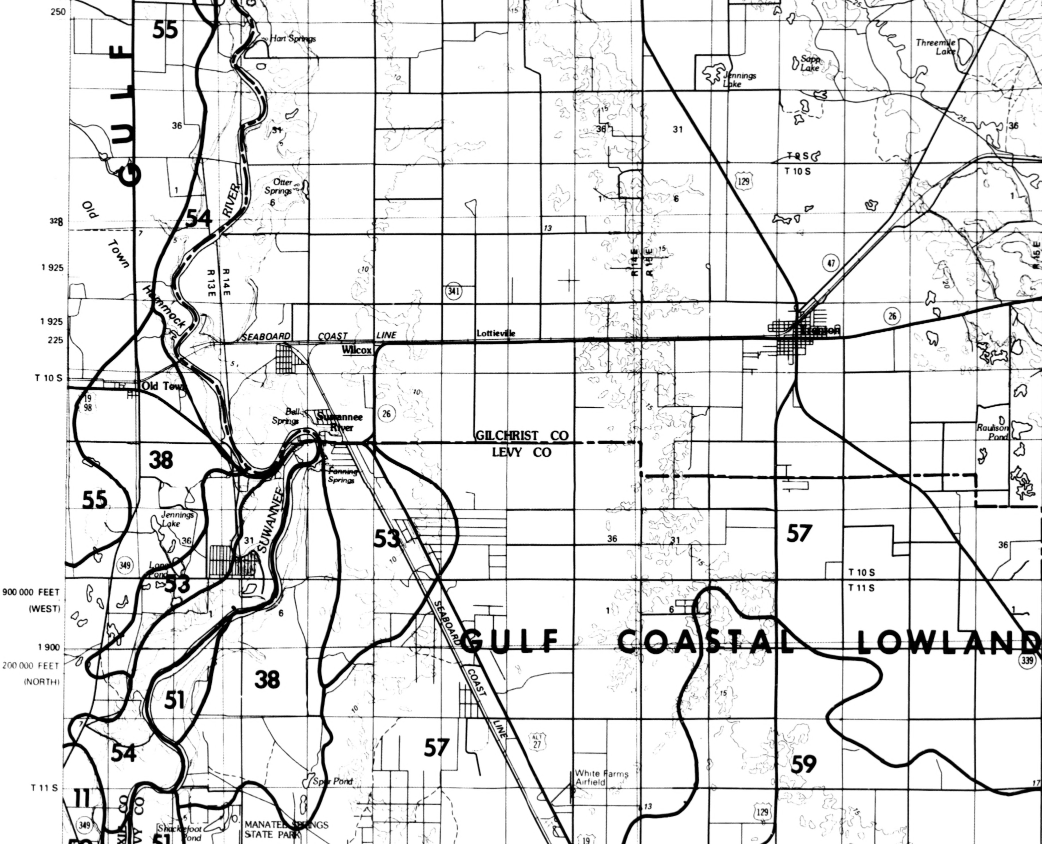
Overlay material compiled in 1983 from latest available data obtained from Federal, State and Local government agencies and other sources.

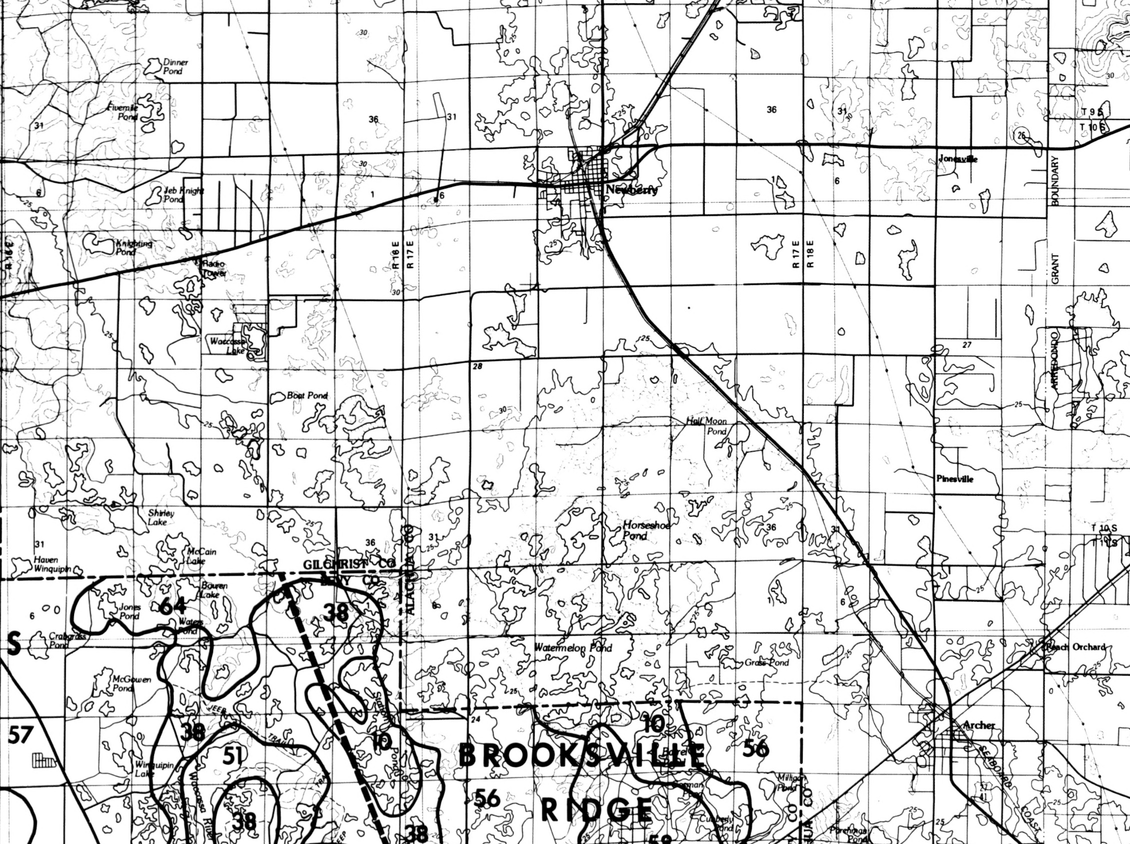
MAJOR SURFACE LANDFORMS

- Western Highlands
- Escambia Valley
- Gulf Coastal Lowlands
- Gulf Barrier Chain
- Marianna Lowlands
- New Hope Ridge
- Greenhead Slope
- Fountain Slope
- Grand Ridge
- Northern Highlands
- Coastal Swamps
- Brooksville Ridge
- Western Valley

SOIL ASSOCIATIONS

1. Lakeland-Eustis-Lakewood Association
2. Lakeland, Ruston, and Norfolk-Sunsweet, Carnegie and Cuthbert Association
3. Red Bay-Blakely Association
4. Tifton-Carnegie-Faceville Association
5. Norfolk-Ruston-Savannah Association
6. Tifton-Irvington-Lynchburg Association
7. Klej-Leon Association
8. Huckabee-Kalmia-Izagota Association
9. Coastal Dune Land and Beach-Tidal Marsh Association
10. Plummer-Rutlege-Alluvial Land-Fresh Water Swamp-Dorovan-Pamlico Association
11. Lakeland-Paola-Kureb-St. Lucie-Rimini Association
12. Lakeland-Troup Association
13. Troup-Orangeburg Association
14. Dothan-Orangeburg Association
15. Red Bay-Lucy Association


250
328
1 925
1 925
225
T 10 S
900 000 FEET
(WEST)
1 900
200 000 FEET
(NORTH)
T 11 S
GULF
GULF COASTAL LOWLAND
Old Town Hammock
Hart Springs
Otter Springs
Jennings Lake
Sapp Lake
Threemile Lake
T 9 S
T 10 S
T 11 S
R 13 E
R 14 E
R 15 E
SUWANNEE RIVER
SEABOARD COAST LINE
Lottieville
Wilcox
Trenton
Old Town
Bell Springs
Suwannee River
Fanning Springs
GILCHRIST CO
LEVY CO
Raulison Pond
Jennings Lake
Long Pond
Spar Pond
Shacklefoot Pond
MANATEE SPRINGS STATE PARK
White Farms Airfield
DIXIE CO
LEVY CO
129
47
341
26
19
98
349
ALT 27
339
55
54
38
55
53
51
54
11
53
57
57
59
38
51


Dinner Pond
Fivemile Pond
Jeb Knight Pond
Knighting Pond
Radio Tower
Waccasa Lake
Boat Pond
Shirley Lake
McCain Lake
Haven Winquipin
Bowen Lake
Jones Pond
Waters Pond
Crabgrass Pond
McGowen Pond
Winquipin Lake
Waccasa River
JEEP TRAIL
Stanton Pond
GILCHRIST CO
LEVY CO
ALACHUA CO
Newberry
Jonesville
Half Moon Pond
Horseshoe Pond
Pinesville
Watermelon Pond
Grass Pond
Milligan Pond
Culberly Pond
Parchman Pond
Archer
Peach Orchard
SEABOARD COAST
GRANT
BOUNDARY
ARREDONDO
BROOKSVILLE
RIDGE
T 9 S
T 10 S
T 10 S
T 11 S
R 16 E
R 16 E
R 17 E
R 17 E
R 18 E
26
27
28
24
41
64
38
38
38
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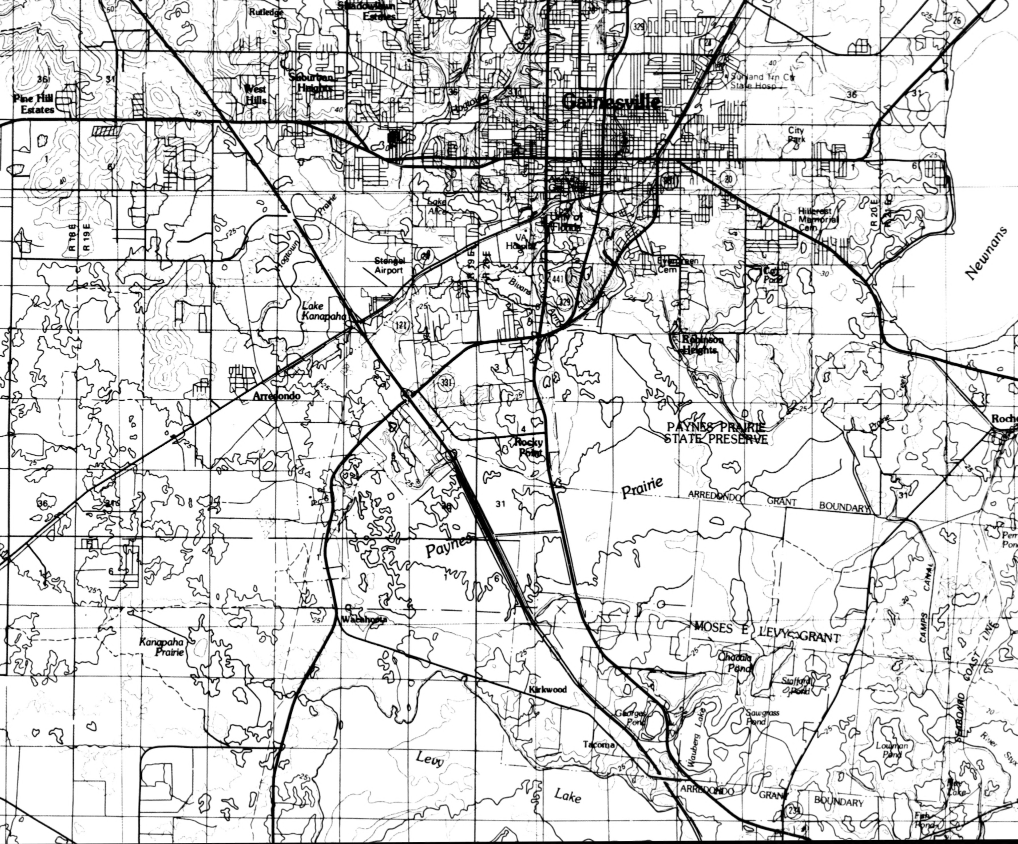
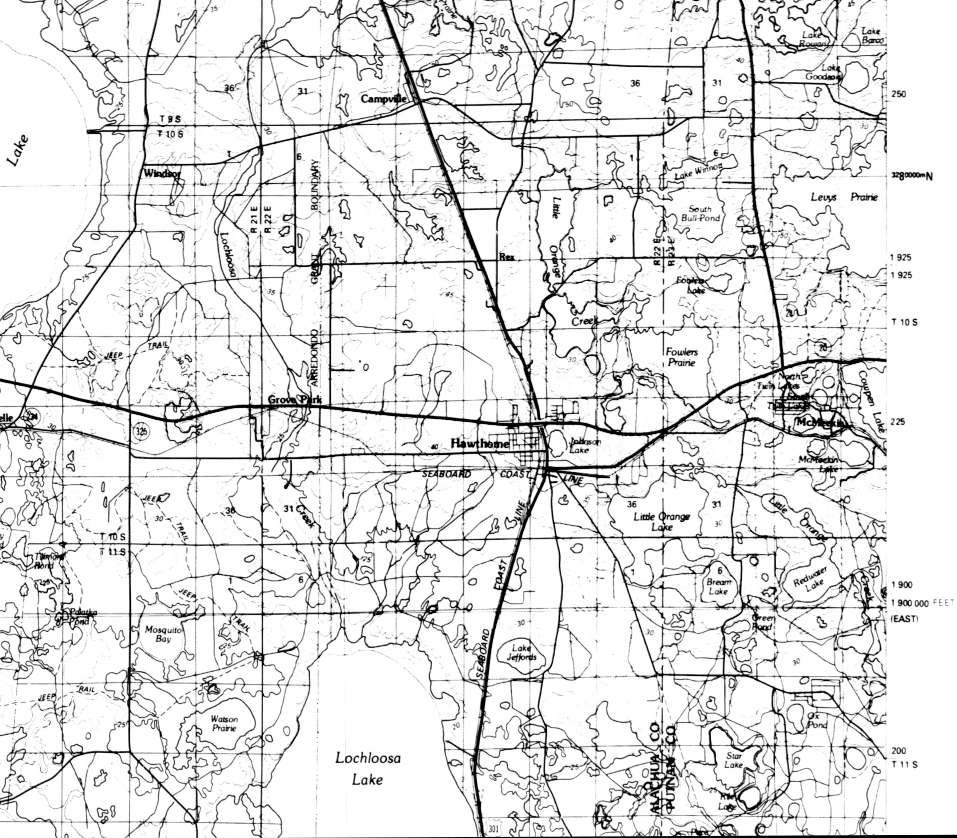
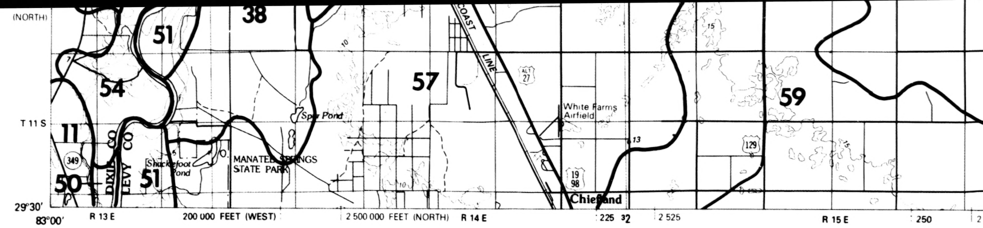
57
51
10
10
56
56
S
25
30
31
36
1
6


Rutledge
Shadowlawn Estates
Pine Hill Estates
West Hills
Suburban Heights
Hogtown
Creek
Gainesville
Sunland Trn Ctr
State Hosp
City Park
Lake Alice
Univ of Florida
VA Hospital
Hillcrest Memorial Cem
Hogtown
Prairie
Stengel Airport
Evergreen Cem
Car Park
Bivans
Arm
Lake Kanapaha
Robinson Heights
Newnans
Arredondo
Rocky Point
PAYNES PRAIRIE STATE PRESERVE
Prairie
ARREDONDO GRANT BOUNDARY
Prairie Creek
Roche
Paynes
Pe Pond
Wacahoota
Kanapaha Prairie
MOSES E LEVY GRANT
CAMPS CANAL
SEABOARD COAST LINE
Chacala Pond
Stafford Pond
Kirkwood
Georges Pond
Sawgrass Pond
Wauberg Lake
Tacoma
Lowman Pond
River Styx
Levy
Lake
ARREDONDO GRANT BOUNDARY
Ney Lake
Fish Pond
R 18 E
R 19 E
R 19 E
R 20 E
R 20 E
441
329
331
121
24
20
26
234


Lake
Windsor
T 9 S
T 10 S
36
31
Campville
36
31
Lake Rowan
Lake Barco
Lake Goodson
250
R 21 E
R 22 E
GRANT
BOUNDARY
ARREDONDO
Lochloosa
Little Orange
Lake Winnott
South Bull Pond
328 0000m N
Levys Prairie
Rex
R 22 E
R 23 E
Fowlers Lake
1 925
1 925
T 10 S
Creek
Fowlers Prairie
JEEP TRAIL
Grove Park
North Twin Lakes
South Twin Lakes
McMeekin
Cowpen Lake
225
324
325
Hawthorne
Johnson Lake
McMeekin Lake
SEABOARD
COAST
LINE
36
31
Creek
Little Orange Lake
31
Little Orange
T 10 S
T 11 S
Tillmans Pond
Palatka Pond
Bream Lake
Redwater Lake
Creek
1 900
1 900 000 FEET (EAST)
Green Pond
Mosquito Bay
Lake Jeffords
Watson Prairie
Ox Pond
Lochloosa Lake
ALACHUA CO
PUTNAM CO
Star Lake
Rice Lake
200
T 11 S
301
20
25
30
35
40
45
50

4. Tifton-Carnegie-Faceville Association
5. Norfolk-Ruston-Savannah Association
6. Tifton-Irvington-Lynchburg Association
7. Klej-Leon Association
8. Huckabee-Kalmia-Izagota Association
9. Coastal Dune Land and Beach-Tidal Marsh Association
10. Plummer-Rutlege-Alluvial Land-Fresh Water Swamp-Dorovan-Pamlico Association
11. Lakeland-Paola-Kureb-St. Lucie-Rimini Association
12. Lakeland-Troup Association
13. Troup-Orangeburg Association
14. Dothan-Orangeburg Association
15. Red Bay-Lucy Association
16. Chipley-Scranton Association
17. Johns-Leaf Association
18. Salt Water Marsh-Bayvi-Dirego Association
19. Fuquay-Lucy-Troup Association
20. Dothan-Orangeburg-Tifton Association
21. Lakeland-Faceville Association
22. Chipley-Albany-Leon Association
23. Ardilla-Leefield-Stilson Association
24. Tifton-Faceville-Greenville Association
25. Norfolk-Ruston-Goldsboro Association
26. Tifton-Faceville-Marlboro Association
27. Lakeland-Cuthbert-Shubuta Association
28. Blanton-Klej-Plummer Association
29. Goldsboro-Lynchburg-Rains Association
30. Kureb-Resota-Mandarin Association
31. Lakeland-Foxworth-Centenary Association
32. Leefield-Albany-Stilson Association
33. Hurricane-Chipley-Albany Association
34. Pottsburg-Leon-Rutlege Association
35. Plummer-Pelham Association
36. Rutlege-Allanton-Pickney Association
37. Chipley-Albany-Stilson Association
38. Leon-Albany-Plummer-Chipley-Osier Association
39. Dunbar-Bladen Association
40. Dothan-Stilson-Lucy Association
41. Ardilla-Leefield-Pansey Association
42. Chipley-Albany-Blanton Association
43. Leon-Felda-Matmon Association
44. Dothan-Orangeburg-Red Bay Association
45. Alpin-Blanton-Eustis Association
46. Orangeburg-Lucy-Dothan Association
47. Chipley-Albany-Plummer Association
48. Leon-Mascotte-Rutlege Association
49. Broward, var.-Matmon-Osier Association
50. Manatee, var.-Felda, Var.-Copeland, Var. Association
51. Fresh Water Swamp, Shallow to Limestone Association
52. Salt Water Marsh and Swamp-Coastal Dunes Association
53. Alpin-Blanton Association
54. Chipley-Blanton-Swamp Association
55. Adamsville, var.-Chiefland-Blanton Association
56. Candler-Apopka Association
57. Jonesville-Chiefland-Archer Association
58. Arredondo-Gainesville Association
59. Hernando-Archer-Chiefland Association
60. Sparr-Lochloosa-Tavares Association
61. Adamsville-Osier Association
62. Bushnell-Wabasso-Felda Association
63. Blichton-Flemington-Kanapaha Association
64. Leon-Mascotte-Surrency Association

MICROCOPY RESOLUTION TEST CHART
NBS 1010a
(ANSI and ISO TEST CHART No. 2)
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3


(NORTH)
38
51
54
57
59
T 11 S
11
349
DIXIE CO
LEVY CO
50
51
Shacklefoot Pond
Spar Pond
MANATEE SPRINGS STATE PARK
COAST LINE
ALT 27
White Farms Airfield
13
19
98
129
15
10
Chiefland
29°30'
83°00'
R 13 E
200 000 FEET (WEST)
2 500 000 FEET (NORTH)
R 14 E
225
32
2 525
R 15 E
250

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1982

THE FLORIDA ECOLOGICAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES, NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS - 82/47) AND THE MINERALS MANAGEMENT SERVICE FOR COASTAL PLANNERS, DECISION MAKERS, AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES THE COASTAL COUNTIES: ESCAMBIA, SANTA ROSA, OKALOOSA, WALTON, WASHINGTON, BAY, CALHOUN, GULF, FRANKLIN, WAKULLA, JEFFERSON, TAYLOR, DIXIE, LEVY, CITRUS AND HERNANDO, AND EXTENDS OFFSHORE APPROXIMATELY 10 MILES. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION:

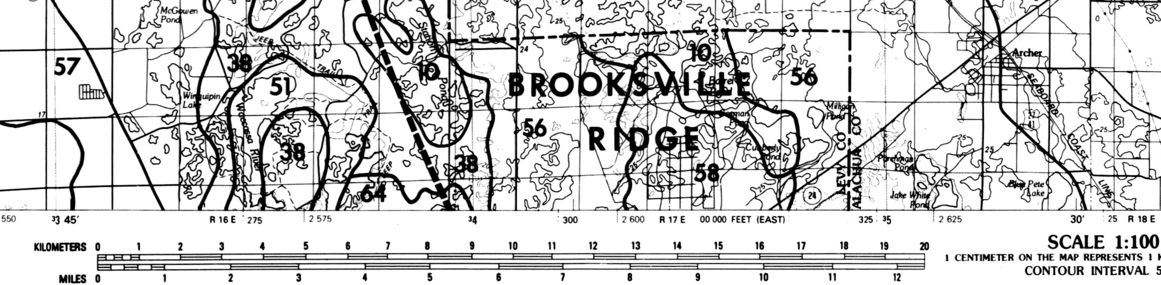
LANDFORMS: Physiographic Map of Florida, State Bureau of Geology, 1980.

SOILS: General Soils Atlas of Florida, Division of State Planning, 1975.
General Soils Atlas of Florida, U.S. Soil Conservation Service, 1982.

ACTIVE DUNES: Black and White Aerial Photography, 1:80,000 Scale, Mark Hurd Aerial Surveys Inc., 1980.
Topographic Maps, 1:24,000 Scale, U.S. Geological Survey, various dates.

GEOLOGIC FAULTS: Map of Escambia and Santa Rosa Counties Showing Contours on top of the Lower Limestone of the Floridan Aquifer, State Bureau of Geology, 1965.

FOR COMPLETE REFERENCES SEE MAP NARRATIVE


McGowen Pond
57
38
51
10
BROOKSVILLE
RIDGE
56
58
64
Winquipin Lake
Waccasa River
Archer
Milligan Pond
LEVY CO
ALACHUA CO
Lake White Pond
Pete Lake
SEABOARD COAST LINE
550
33 45′
R 16 E
275
2 575
34
300
2 600
R 17 E
00 000 FEET (EAST)
325
35
2 625
30′
25
R 18 E
KILOMETERS
MILES
SCALE 1:100
1 CENTIMETER ON THE MAP REPRESENTS 1
CONTOUR INTERVAL 5

10. **Plummer-Rutlege-Alluvial Land-Fresh Water Swamp-Dorovan-Pamlico Association:** Nearly level, poorly drained soils with a thick surface layer overlying a loamy subsoil and very poorly drained soils that are sandy throughout.

11. **Lakeland-Paola-Kureb-St. Lucie-Rimini Association:** Nearly level to steep, excessively drained soils, sandy throughout.

38. **Leon-Albany-Plummer-Chipley-Osier Association:** Nearly level, poorly drained sandy soils with weakly cemented sandy subsoil, and poorly drained soils with very thick sandy layers over loamy subsoil.

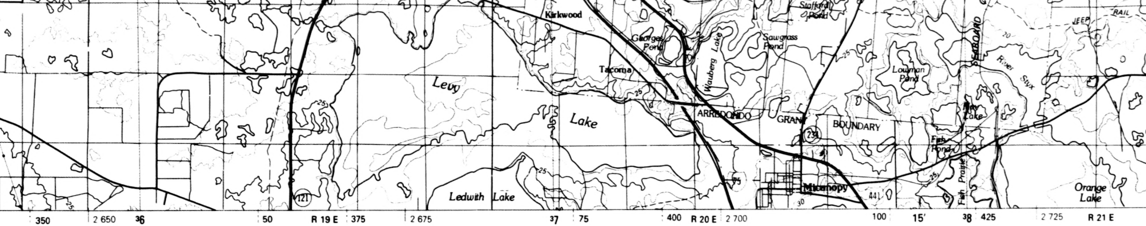
48. **Leon-Mascotte-Rutlege Association:** Nearly level, poorly drained sandy soils with weakly cemented sandy subsoil, and poorly drained sandy soils with a weakly cemented sandy subsoil layer underlain by loamy subsoil, and very poorly drained soils sandy throughout.

50. **Manatee, var.-Felda, Var.-Copeland, Var. Association:** Nearly level, very poorly and poorly drained sandy soils with loamy subsoils, and very poorly drained sandy soils with loamy subsoils, shallow to limestone.

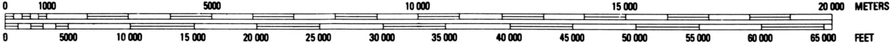
51. **Fresh Water Swamp, Shallow to Limestone Association:** Nearly level, very poorly drained soils, shallow to limestone, subject to prolonged flooding.

53. **Alpin-Blanton Association:** Nearly level to sloping, excessively drained soils with very thick sandy layers over thin loamy sand or sandy loam lamella, and moderately well drained soils with very thick sandy layers over loamy subsoil.

54. **Chipley-Blanton-Swamp Association:** Nearly level to gently sloping, moderately well drained soils, sandy throughout, and moderately well drained soils with very thick sandy layers over loamy subsoils and very poorly drained soils.


Kirkwood
Stafford Pond
Georges Pond
Sawgrass Pond
Tacoma
Wauberg Lake
Lowman Pond
SEABOARD
JEEP
RAIL
River Styx
Levy Lake
ARREDONDO
GRANT
BOUNDARY
234
Bay Lake
Fish Pond
Fish Prairie
Ledwith Lake
Micanopy
441
121
Orange Lake
25
20
30
350
2 650
36
50
R 19 E
375
2 675
37
75
400
R 20 E
2 700
100
15′
38
425
2 725
R 21 E

000
KILOMETER ON THE GROUND
5 METERS


0
1000
5000
10 000
15 000
20 000
METERS
0
5000
10 000
15 000
20 000
25 000
30 000
35 000
40 000
45 000
50 000
55 000
60 000
65 000
FEET

55. **Adamsville, var.-Chiefland-Blanton Association:** Nearly level to gently sloping, somewhat poorly drained soils, sandy throughout, and well drained soils with thick sandy layers over loamy subsoils that are underlain by limestone, and moderately well drained soils with very thick sandy layers over loamy subsoils.

56. **Candler-Apopka Association:** Nearly level to sloping, excessively drained soils with very thick sandy layers over thin loamy or sandy loam lamella, and well drained soils with very thick sandy layers over loamy subsoil.

57. **Jonesville-Chiefland-Archer Association:** Nearly level to sloping, excessively drained soils with very thick sandy layers over loamy subsoil, and moderately well drained soils with loamy or clayey subsoils underlain by limestone.

58. **Arredondo-Gainesville Association:** Nearly level to sloping, well drained soils with very thick sandy layers over loamy subsoil, and well drained soils, sandy throughout.

59. **Hernando-Archer-Chiefland Association:** Nearly level to gently sloping, moderately well to well drained sandy soils with loamy or clayey subsoils underlain by limestone.

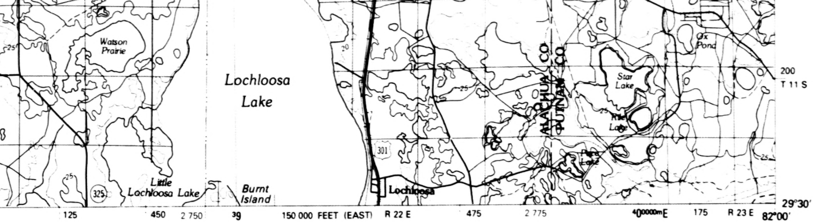
64. **Leon-Mascotte-Surrency Association:** Nearly level, poorly drained sandy soils with weakly cemented sandy subsoil, and poorly drained sandy soils with a weak cemented sandy subsoil layer underlain by loamy subsoil and very poorly drained sandy soils with clayey subsoil.

E = __ ft/yr ┣‐‐‐‐‐‐‐┫ BEACH EROSION AREA (Period of Record: 1957-1981; Univ. of West Florida, 1981)

A = __ ft/yr ┣━━━━━━━┫ BEACH ACCRETION AREA (Period of Record: 1957-1981; Univ. of West Florida, 1981)

■ GULF BARRIER ISLAND

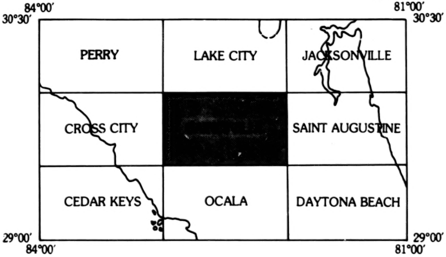
Ⓓ ACTIVE DUNE AREA


Watson Prairie
Lochloosa Lake
Little Lochloosa Lake
Burnt Island
Lochloosa
Star Lake
Pike Lake
Ox Pond
ALACHUA CO
PUTNAM CO
301
325
200
T 11 S
29°30′
125
450
2 750
39
150 000 FEET (EAST)
R 22 E
475
2 775
400000mE
175
R 23 E
82°00′

GAINESVILLE, FLORIDA

N2930–W8200/30 X 60

1981


84°00′
30°30′
81°00′
30°30′
PERRY
LAKE CITY
JACKSONVILLE
CROSS CITY
SAINT AUGUSTINE
CEDAR KEYS
OCALA
DAYTONA BEACH
29°00′
84°00′
29°00′
81°00′

U
D
NORMAL FAULT
(Showing relative vertical movement, U, up, and D, down)

U
D
SUB-SURFACE NORMAL FAULT
(Showing relative vertical movement, U, up, and D, down)

STUDY AREA BOUNDARY

Offshore

Inland (County)

Inland (State)

Alpin-Blanton Association
Chipley-Blanton-Swamp Association
Adamsville, var.-Chiefland-Blanton Association
Candler-Apopka Association
Jonesville-Chiefland-Archer Association
Arredondo-Gainesville Association
Hernando-Archer-Chiefland Association
Sparr-Lochloosa-Tavares Association
Adamsville-Osier Association
Bushnell-Wabasso-Felda Association
Blichton-Flemington-Kanapaha Association
Leon-Mascotte-Surrency Association
Lynne-Pomona-Pompano Association
Candler-Paola-Tavares Association
Candler-Adamsville-Pompano Association
Arredondo-Kendrick Association
Broward-Boca Association
Panasoffkee-Bushnell Association
Myakka-Basinger Association
Meggett, var.-Pompano Association
Terra Ceia-Placid Association
Arredondo-Sparr-Kendrick Association
Candler-Lake Association
Masaryk Association
Nobleton-Blichton-Flemington Association
EauGallie-Wabasso-Basinger Association
Paisley-Floridana-Wabasso Association
Okeelanta-Aripeka-Terra Ceia Association
Homosassa-Weekiwachee-Lacoochee Association
Floridana-Basinger Association
Salt Water Marsh and Swamp Association
Fresh Water Swamp and Marsh Association
Blichton-Lochloosa-Kendrick Association
Paisley-Bushnell Association
Myakka-Pomello Association

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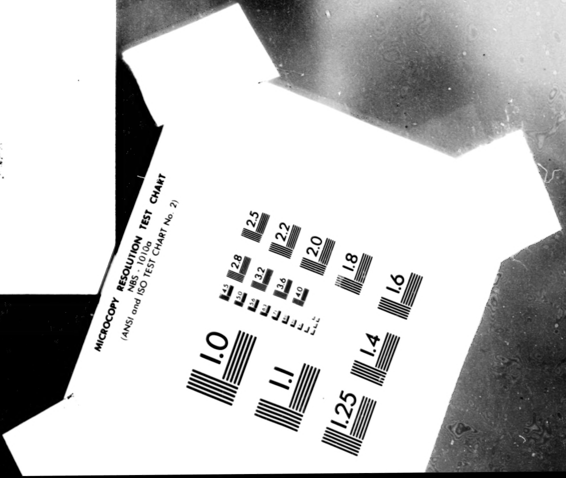
BEST AVAILABLE COPY


MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)
2.5
2.2
2.0
1.8
1.6
2.8
3.2
3.6
4.0
4.5
5.0
5.6
1.0
1.1
1.25
1.4